

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 0000054288	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/EP2004/000706	International filing date (day/month/year) 28.01.2004	Priority date (day/month/year) 17.02.2003
International Patent Classification (IPC) or national classification and IPC C14C 9/02		
Applicant BASF AKTIENGESELLSCHAFT		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☐ (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:

☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/000706

Box No. I

Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-25 _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. 1-17 _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* _____ received by this Authority on _____
- nos.* _____ received by this Authority on _____
- ☐ the drawings:
- sheets _____ as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/000706

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-17</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-17</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-17</u>	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Reference is made to the following document:

D1: EP-A-1 087 021 (cited in the application)

1. Novelty (PCT Article 33(2)) / Inventive step (PCT Article 33(3))

The subject matter of the present claims **1-17** is novel over the prior art as cited in the international search report.

None of the documents cited in the international search report discloses a formulation that contains polysiloxane(s) containing carboxyl groups, polysiloxane(s) free from carboxyl groups and at least one emulsifier, a method for the production thereof, a method for hydrophobing leather and pelts using said formulation and leather or pelts thus treated.

The subject matter of the present claims **1-17** also involves an inventive step, since D1, which can be regarded as the closest prior art, does not, taken

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

either alone or in combination with any other document cited in the international search, contain any indication of the claimed method for the following reasons:

D1 discloses a leather treatment agent for hydrophobing and retanning leather, said agent containing polysiloxane that contains carboxyl groups, a polyacrylate, liquid paraffin and N-laurylsarcosine as emulsifier.

The impregnation formulation claimed in the present claims differs from the formulation known from D1 by virtue of the additional polysiloxane components that are free of carboxyl groups.

The technical problem of interest lies in the development of a method for hydrophobing leather, with which hydrophobic leather with an even colour can be obtained using cheaper polysiloxanes.

The above problem was solved using the aforementioned formulations, chrome tanned leather being treated in the retanning stage using an aqueous emulsion that contains, in addition to polysiloxanes that contain carboxyl groups and polysiloxanes that are free of carboxyl groups, N-oleyl sarcosine, triglyceride, NaOH and paraffin (emulsion 1.1, table 1). Leather is obtained which absorbs less water, is more flexible and has a more even colour (leather 3.1, table 2) than similar leathers which were also treated with an

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

emulsion, but with one that does not contain polysiloxane that is free of carboxyl groups (leather V3.5, table 2).

Since no other document renders obvious the claimed method for hydrophobing leather, an inventive step is acknowledged in respect of the subject matter of the application.

2. Industrial applicability (PCT Article 33(4))

The application concerns a polysiloxane-containing emulsion for hydrophobing leather and pelts and is therefore industrially applicable.